

Mathematics Background Questionnaire

Grade 12

This section has 26 questions. Mark your answers in your booklet. Unless directed otherwise, fill in only **one** oval for each question.

VC298762

1. Which courses have you taken from eighth grade to the present? If you have taken a course more than once, give the **most recent** year you took it. Fill in **one** oval on each line. INCLUDE courses taken in summer school, but DO NOT INCLUDE topics that were only taught as part of a longer course (such as trigonometry taught in drafting class or computer programming taught in Algebra II).

	I have never taken this course	I took this course in or before Grade 8	I took this course in Grade 9	I took this course in Grade 10	I took this course in Grade 11	I took this course in Grade 12	
a. Basic or general mathematics course	(A)	(B)	(C)	(D)	(E)	(F)	VC543280
b. Tech-prep mathematics, business mathematics, consumer mathematics, or other applied mathematics course	(A)	(B)	(C)	(D)	(E)	(F)	VB543281
c. Introduction to algebra or pre-algebra course	(A)	(B)	(C)	(D)	(E)	(F)	VB543282
d. Algebra I course	(A)	(B)	(C)	(D)	(E)	(F)	VB543283
e. Geometry course	(A)	(B)	(C)	(D)	(E)	(F)	VB543285
f. Algebra II course, with or without trigonometry	(A)	(B)	(C)	(D)	(E)	(F)	VB543286
g. Trigonometry (as a separate course)	(A)	(B)	(C)	(D)	(E)	(F)	VB543287
h. Pre-calculus course (also called third-year algebra or elementary functions and analysis)	(A)	(B)	(C)	(D)	(E)	(F)	VB543288
i. Unified, integrated, or sequential mathematics course	(A)	(B)	(C)	(D)	(E)	(F)	VB543289
j. Probability or statistics course	(A)	(B)	(C)	(D)	(E)	(F)	VB543290
k. Calculus course	(A)	(B)	(C)	(D)	(E)	(F)	VB543292
l. Discrete or finite mathematics course	(A)	(B)	(C)	(D)	(E)	(F)	VB543291
m. Other mathematics course	(A)	(B)	(C)	(D)	(E)	(F)	VB543293
n. Computer programming course (such as C++, Pascal, Visual Basic, etc.)	(A)	(B)	(C)	(D)	(E)	(F)	VB543294

GO ON TO THE NEXT PAGE

2. Are you currently enrolled in or have you taken an Advanced Placement (AP) course in mathematics? Fill in **one or more** ovals. VB543295
- ☐ Ⓐ Yes, I am enrolled in or have taken Advanced Placement (AP) Calculus AB.
 - ☐ Ⓑ Yes, I am enrolled in or have taken Advanced Placement (AP) Calculus BC.
 - ☐ Ⓒ Yes, I am enrolled in or have taken Advanced Placement (AP) Statistics.
 - ☐ Ⓓ No, I have never taken an Advanced Placement (AP) mathematics course.
3. Are you currently enrolled in or have you taken any **online** mathematics courses for **high school or college credit**? VB543297
- ☐ Ⓐ Yes
 - ☐ Ⓑ No
4. Are you currently enrolled in or have you taken International Baccalaureate courses in mathematics? QK070703
- ☐ Ⓐ Yes
 - ☐ Ⓑ No
5. Was there a mathematics course that you would have liked to have taken this school year but did not? VC288225
- ☐ Ⓐ Yes, but my school does not offer the course.
 - ☐ Ⓑ Yes, but the course was full.
 - ☐ Ⓒ Yes, but I did not have the necessary prerequisites.
 - ☐ Ⓓ Yes, but my schedule was full.
 - ☐ Ⓔ No, there was no other course that I wanted to take.



GO ON TO THE NEXT PAGE

VC189706

6. Please indicate how much you DISAGREE or AGREE with the following statements. Fill in **one** oval on each line.

	Strongly disagree	Disagree	Agree	Strongly agree	
a. Because mathematics is fun, I wouldn't want to give it up.	<input type="radio"/> (A)	<input type="radio"/> (B)	<input type="radio"/> (C)	<input type="radio"/> (D)	VC189707
b. I like mathematics.	<input type="radio"/> (A)	<input type="radio"/> (B)	<input type="radio"/> (C)	<input type="radio"/> (D)	VC189710
c. Mathematics is one of my favorite subjects.	<input type="radio"/> (A)	<input type="radio"/> (B)	<input type="radio"/> (C)	<input type="radio"/> (D)	VC189711

VB543267

7. What kind of **calculator** do you usually use when you are **not in mathematics class**?

- ☐ (A) None
- ☐ (B) Basic four-function (addition, subtraction, multiplication, division)
- ☐ (C) Scientific (not graphing)
- ☐ (D) Graphing

VC299329

9. What kind of calculator do you have available for this test?

- ☐ (A) Don't know (NAEP provided)
- ☐ (B) Basic four-function (addition, subtraction, multiplication, division)
- ☐ (C) Scientific (not graphing)
- ☐ (D) Graphing

VC299327

8. Did you bring your own calculator for this test?

- ☐ (A) Yes
- ☐ (B) No

VC189591

10. Do you use the Internet at home?

- ☐ (A) Yes
- ☐ (B) No


 GO ON TO THE NEXT PAGE

- VB517284
11. Are you currently taking a mathematics course?
- A

 Yes → *Go to Question 12*
- B

 No → *Skip to Question 22*

- VC290281
12. Do you study or do work for mathematics at an after-school or tutoring program?
- A

 Yes
- B

 No

- VC720647
13. How often do you feel the following way in your mathematics class? Fill in **one** oval on each line.

	Never or hardly ever	Sometimes	Often	Always or almost always	
a. I have a clear understanding of what my mathematics teacher is asking me to do.	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	VC720650
b. The mathematics work is too easy.	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	VC720651
c. The mathematics work is challenging.	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	VC720652
d. The mathematics work is engaging and interesting.	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	VC720653
e. I am learning.	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	VC720655



14. How often do you use these different types of calculators in your mathematics class? Fill in **one** oval on each line.

VB517159

	Never use	Sometimes, but not often	Usually use	
a. Basic four-function (addition, subtraction, multiplication, division)	(A)	(B)	(C)	VB517160
b. Scientific (not graphing)	(A)	(B)	(C)	VB517161
c. Graphing	(A)	(B)	(C)	VB517282

15. When you take a mathematics test or quiz, how often do you use a calculator?

VB517158

- (A) Never
- (B) Sometimes
- (C) Always

16. For each of the following activities, how often do you use a **calculator**? Fill in **one** oval on each line.

VB543269

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day	
a. To check your work on mathematics homework assignments	(A)	(B)	(C)	(D)	(E)	VB543270
b. To calculate the answers to mathematics homework problems	(A)	(B)	(C)	(D)	(E)	VB543271
c. To work in class on mathematics lessons led by your teacher	(A)	(B)	(C)	(D)	(E)	VB543272



VB525162

17. How often do you use a computer for mathematics at school?

- ☐ Ⓐ Never or hardly ever
- ☐ Ⓑ Once every few weeks
- ☐ Ⓒ About once a week
- ☐ Ⓓ Two or three times a week
- ☐ Ⓔ Every day or almost every day

VC189586

18. Do you use a computer for mathematics homework at home?

- ☐ Ⓐ Yes
- ☐ Ⓑ No

VB543148

19. On a typical day, how much time do you spend doing work for mathematics class on a computer? Include work you do in class and for homework.

- ☐ Ⓐ None
- ☐ Ⓑ Half an hour or less
- ☐ Ⓒ About 1 hour
- ☐ Ⓓ About 2 hours
- ☐ Ⓔ More than 2 hours



GO ON TO THE NEXT PAGE

20. When you are doing mathematics for school or homework, how often do you use these **different types of computer programs**? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day	
a. A spreadsheet program for mathematics class assignments	(A)	(B)	(C)	(D)	(E)	VB543157
b. A program to practice or drill on mathematics facts (addition, subtraction, multiplication, division)	(A)	(B)	(C)	(D)	(E)	VB543158
c. A program that presents new mathematics lessons with problems to solve	(A)	(B)	(C)	(D)	(E)	VB543160
d. The Internet to learn things for mathematics class	(A)	(B)	(C)	(D)	(E)	VB543159
e. A calculator program on the computer to solve or check problems for mathematics class	(A)	(B)	(C)	(D)	(E)	VB543161
f. A graphing program on the computer to make charts or graphs for mathematics class	(A)	(B)	(C)	(D)	(E)	VB543262
g. A statistical program to calculate patterns such as correlations or cross tabulations	(A)	(B)	(C)	(D)	(E)	VB517157
h. A word processing program to write papers for mathematics class	(A)	(B)	(C)	(D)	(E)	VB543156
i. A program to work with geometric shapes for mathematics class	(A)	(B)	(C)	(D)	(E)	VB543263

GO ON TO THE NEXT PAGE

21. How often do you use e-mail, instant messages, blogs, or text messages to do any of the following? Fill in **one** oval on each line. VC189613

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. Talk online with friends about mathematics work	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E
b. Get help with mathematics from someone other than your teacher, family, classmates, or friends	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E

22. How hard was this test compared to most other tests you have taken this year in school? VB595182

- ☐ A Easier than other tests
☐ B About as hard as other tests
☐ C Harder than other tests
☐ D Much harder than other tests

24. How important was it to you to do well on this test? VB595184

- ☐ A Not very important
☐ B Somewhat important
☐ C Important
☐ D Very important

23. How hard did you try on this test compared to how hard you tried on most other tests you have taken this year in school? VC034559

- ☐ A Not as hard as on other tests
☐ B About as hard as on other tests
☐ C Harder than on other tests
☐ D Much harder than on other tests

25. How much education do you think you will complete? QK070697

- ☐ A I will not finish high school.
☐ B I will graduate from high school.
☐ C I will have some education after high school.
☐ D I will graduate from college.
☐ E I will go to graduate school.
☐ F I don't know.

GO ON TO THE NEXT PAGE

VC101417

26. What do you expect that your main activity will be in the year after you leave high school?

- Ⓐ Working full time
- Ⓑ Attending a vocational, technical, or business school
- Ⓒ Attending a two-year college
- Ⓓ Attending a four-year college, service academy, or university
- Ⓔ Serving in the military
- Ⓕ Other

